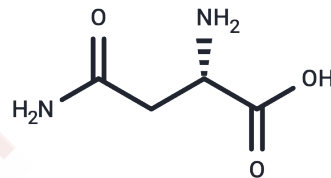


L-Asparagine

Chemical Properties

CAS No. :	70-47-3
Formula:	C ₄ H ₈ N ₂ O ₃
Molecular Weight:	132.12
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	L-Asparagine (Asparamide) is a non-essential amino acid that is involved in the metabolic control of cell functions in nerve and brain tissue. It is biosynthesized from ASPARTIC ACID and AMMONIA by asparagine synthetase.
Targets(IC50)	Apoptosis,Endogenous Metabolite,DNA/RNA Synthesis

Solubility Information

Solubility	DMSO: Insoluble, H ₂ O: 9.9 mg/mL (74.93 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.5689 mL	37.8444 mL	75.6888 mL
5 mM	1.5138 mL	7.5689 mL	15.1378 mL
10 mM	0.7569 mL	3.7844 mL	7.5689 mL
50 mM	0.1514 mL	0.7569 mL	1.5138 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Alrifai, M., & Alfadhel, M. (2016). Worsening of Seizures After Asparagine Supplementation in a Child with Asparagine Synthetase Deficiency. *Pediatric Neurology*, 58, 98-100. doi: 10.1016/j.pediatrneurol.2016.01.024

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Curtis, T., Powers, S., Wang, R., & Halford, N. (2018). Effects of variety, year of cultivation and sulphur supply on the accumulation of free asparagine in the grain of commercial wheat varieties. *Food Chemistry*, 239, 304-313. doi: 10.1016/j.foodchem.2017.06.113

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